~Fisher, Bronder

Gulf of Mexico Harmful Algal Bloom Bulletin

22 September 2005

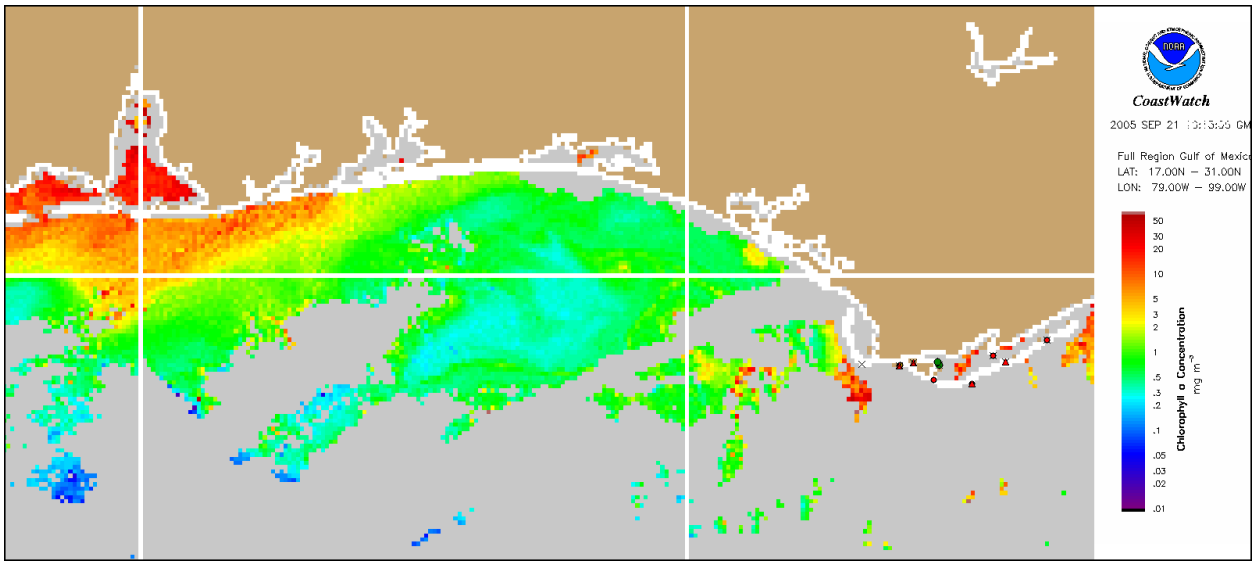
National Ocean Service

National Environmental Satellite, Data, and Information Service

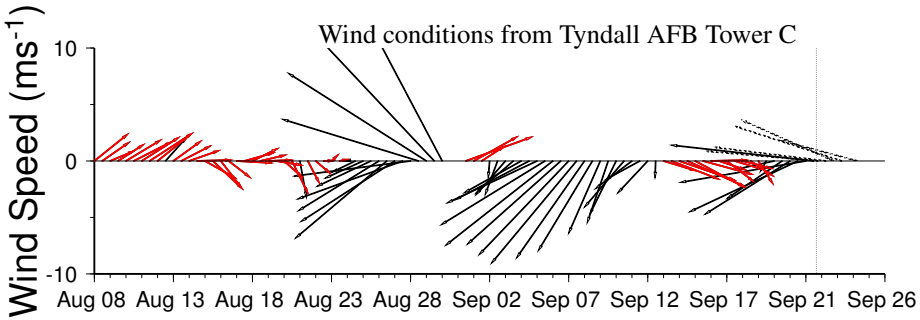
Last bulletin: September 22, 2005

Conditions: A harmful algal bloom has been identified onshore from southern Pinellas to Collier County. Today through Monday patchy very low to low impacts are possible along the coast from southern Pinellas to Collier County, with moderate to high impacts possible in bayside areas of southern Pinellas County. A harmful algal bloom has also been identified in the Florida Panhandle from Bay County east to Levy County. Patchy moderate impacts are possible in Bay and Gulf Counties through Saturday, with patchy very low to low impacts Sunday and Monday. Very low to low impacts are possible in Wakulla and Franklin Counties, with very low impacts possible in Dixie and Levy Counties today through Monday. Dead fish were reported at Lido Beach in northern Sarasota County over the last day. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

Analysis: A *K. brevis* bloom persists along the Florida panhandle, extending from Bay to Levy County. Satellite imagery analysis is limited as Hurricane Rita passes through the Gulf of Mexico. Recent sampling (September 19; FWC/FWRI) suggests the bloom has dissipated in Dixie and Levy County; no *K. brevis* was found. Several samples throughout Apalachicola Bay contained no *K. brevis* as well; although very low and low counts still remain. Wind transport modeling suggests the bloom may be located 40-70 km west of its previous location on September 18. Strong onshore winds from Apalachicola west to Pensacola will increase impacts at the beach through Saturday in Bay and Gulf Counties. Northerly and westerly transport of the bloom is probable; dead fish and *K. brevis* in the offshore Big Bend region may be transported to the coast over the weekend. Continual reports of discolored water are likely as resuspension arises due to Hurricane Rita.

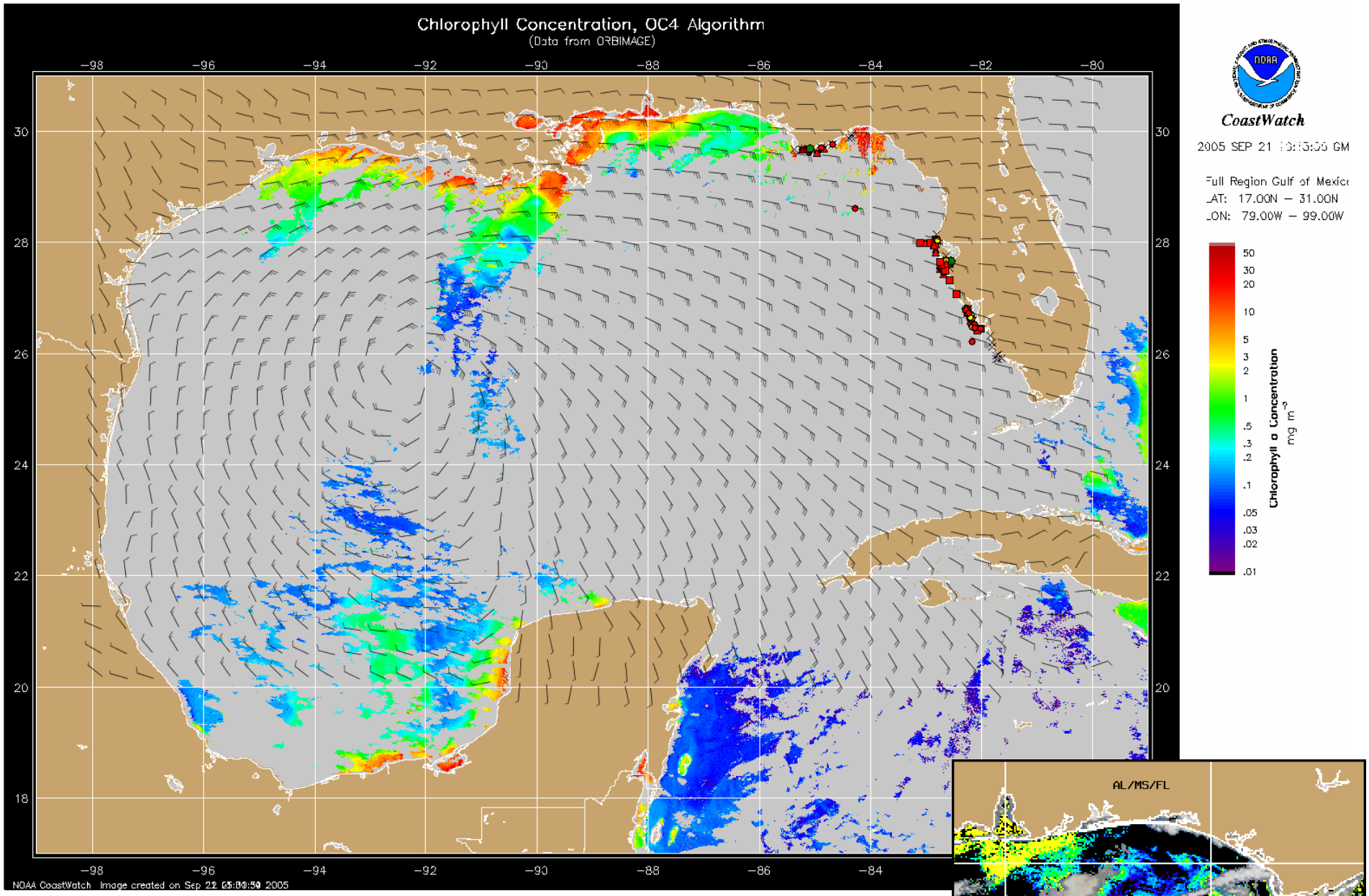


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s).

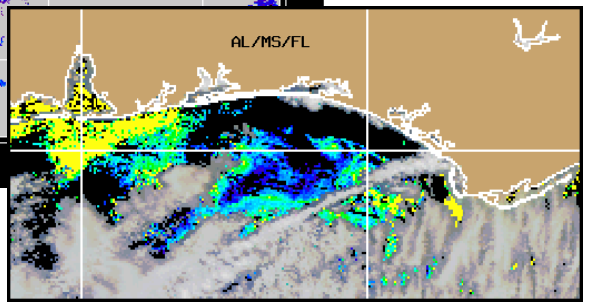


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Florida Panhandle: From Apalachicola west to Pensacola strong (20-25 knot, 10-13 m/s) easterlies today will turn southeasterly tonight into Friday; weakening to 15-20 knots ((8-10 m/s) Friday night. Milder 10-15 knot easterlies (5-8 m/s) Sunday turning northeasterly Monday (5-10kts, 3-5m/s). From Apalachicola east to Cedar Key shifting easterlies and southeasterlies (15-20 knots, 8-10 m/s) will predominate through Saturday. Milder easterlies expected Sunday (10-15 knots, 5-8 m/s) and Monday (5-10kts, 3-5m/s).



Chlorophyll concentration from satellite and forecast winds for September 23, 2005 06Z with cell concentration sampling data from September 9, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis)